

THE CORRECT NAMES OF TWO PHLAEOTHIRIPIDS ASSOCIATED WITH PINE

(THYSANOPTERA)

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The following synonymies are presented for the benefit of those concerned with the biology and control of *Gnophothrips fuscus* (Morgan) on *Pinus* spp.

Gnophothrips fuscus (Morgan), n. comb.

Trichothrips fuscus Morgan, 1913, Proc. U.S. Nat. Mus. 46 (2008): 30-31, figs. 55-57. (Holotype from Florida, in USNM, No. 15734.)

Liothrips fuscus (Morgan), Hood, 1918, Queensland Mus. Mem. 6: 132; Stannard, 1957, Ill. Biol. Monog. 25: 61.

Gnophothrips piniphilus J. C. Crawford, 1938, Proc. Wash. Ent. Soc. 40(2): 39. (Holotype from New York, in USNM, No. 52231.) **New synonymy.**

C. Jacot-Guillarmod (in correspondence, 1963) called my attention to this synonymy, which he and I have confirmed by examination of the types. Crawford (1938) described the species under the name *piniphilus* from specimens damaging pine seedlings in New York and Rhode Island. MacNay (1957: 138) reported damage by *piniphilus* to pine in eastern Canada, and I have identified specimens from damaged pine in Florida and Virginia. I have also received a long series collected "from wood of house," in Massachusetts in June, an occurrence I cannot explain, since the species undoubtedly feeds on living trees.

Studies on the biology of *Gnophothrips fuscus* have been complicated by the presence of a similar species, *Leptothrips pini* (Watson), which, although peculiar to pine, is certainly predatory, as its congeners are. *Gnophothrips* can readily be distinguished from *Leptothrips* species by its stouter body and somewhat shorter legs; it lacks the maxillary bridge and prepectus, which are present in *Leptothrips*; and its wings are often reduced, and when fully developed are parallel sided and lack accessory fringe cilia, whereas the wings of *Leptothrips* species are always fully developed and soleshaped, and those of *L. pini* have 4 or 5 accessory fringe cilia.

Leptothrips pini (Watson), n. comb.

Cryptothrips pini Watson, 1915, Ent. News 26(2): 49, pl. 2, figs. 1-4. (Type series from Florida, in the Watson and USNM collections.)

Haplothrips pini (Watson), Watson, 1923, Fla. Agr. Exp. Sta. Bull. 168: 61; Stannard, 1957, Ill. Biol. Monog. 25: 52.

Leptothrips mali (Fitch), Hood, 1927, Ent. News 38(4): 112. Misidentification.

Although Hood (1927) synonymized *Cryptothrips pini* Watson with *Leptothrips mali* (Fitch), he remarked that Florida specimens were

not typical *mali* and might have to be recognized by another name. Most specimens of *Leptothrips* I have seen that were taken on *Pinus* spp. in eastern U.S., including those of Watson's type series in the National Collection, are *pini*.

Leptothrips pini differs from all other species of its genus except *L. singularis* Hood (1941: 149) in having 2 instead of 4 sense cones on antennal segment IV. It differs from *singularis*, also a pinicolous species, in color. *L. singularis* has a pale prothorax and orange internal pigment instead of the uniformly dark body and purple internal pigment typical in the genus. *Leptothrips pini* is represented in the National Collection by specimens from Florida, Georgia, South Carolina, Maryland, New Jersey, and New York; and I have seen a specimen from Michigan that is probably an example of this species.

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ECOLOGICAL NOTES ON TABANIDAE, RHAGIONIDAE, AND XYLOPHAGIDAE IN EUROPE

(DIPTERA)

Tabanidae

A mature larva of *Hybomitra schineri* Lyneborg (det. L. L. Pechuman) was found among emergent vegetation in a shallow, exposed marsh at Vdelaria, 23 km south of the city of Corfu, Corfu, on April 29, 1963. The larva killed and ate 37 second- and third-instar larvae of *Tetanocera ferruginea* Fall. (Diptera: Sciomyzi-